Ontario

FIELD CROP BUDGETS

Publication 60

1. *Alfalfa-Timothy Hay*
2. *Barley*
3. *Spring Canola*
4. *Winter Canola*
5. *Coloured Beans*
6. *Grain Corn*
7. *Silage Corn*
8. *Flax*
9. *Oats*
10. *Organic – Grain Corn and Soybeans*
11. *Organic – Winter Wheat and Spelt*
12. *Organic – Barley and Oats*
13. *Soybeans*
14. *Soft Winter Wheat*
15. *Hard Red Winter Wheat*
16. *Hard Red Spring Wheat*
17. *White/Black Beans*

These crop budgets are a simple format for estimating expenses. The sample costs are only a guide to illustrate a method of preparing your projections. They are based on many assumptions, including seeding rates, levels of fertilizer use, etc. Due to regional differences there may be considerable variation in results.

To project your breakeven price after total costs, enter your farm figures in the spaces provided. The resulting estimate will assist you in choosing your crop mix, and setting target prices and marketing strategies for your farm.

Electronic versions of these crop budget worksheets can be found by going to the *www.ontario.ca/agbusiness* website and choosing Cost of Production Budgets.

MINISTRY OF AGRICULTURE, FOOD AND RURAL AFFAIRS

2010 FIELD CROP BUDGETS

Crop budgets are a management tool to estimate costs and evaluate cropping alternatives. The sample costs are not averages or recommended treatments. The budgets comprise treatments derived from crop advisors in the areas where the crops are commonly grown. There will be differences due to growing region, cropping practices, individual needs and yield expectations. The budgets, unless indicated otherwise, are based on conventional tillage practices. Seed costs, except for the *Bacillus thuringiensis* (Bt), Roundup Ready (RR) and herbicide tolerant Corn, Spring Canola and Soybeans, are non-genetically enhanced varieties. The budgets developed for Bt, RR or herbicide tolerant varieties do not represent an endorsement of these products. They are included due to the current predominance of these production systems in field crop operations.

Identity Preserved (IP) crops require budgeting for any extra expenses and revenue — for example increased seed, weed control, storage and equipment cleaning costs. Some of the budgets provide a line item for this.

Interest rates were calculated at 3.25 per cent for the period between planting and harvest.

These budgets will be most meaningful if you use your expected yields and specific costs in developing production plans. Sample costs were taken from the 2010 Ontario Enterprise Budgets. The crop insurance premiums shown are the producer premiums at the highest coverage level and, at the floating-price, if available.

The estimated costs for machinery are derived from agricultural engineering formulas and Ontario average custom rates. The Ontario average custom rates are allocated across the six machinery-related expenses. It is recommended that you use your records to derive your costs. Experience is the best guide to help budget machinery costs. Prior year's statements of income and expenses can provide information on equipment repairs, maintenance, and fuel costs. The portion of those costs that relate to crop production can be divided by the acres of crop produced to arrive at a cost per acre.

Overhead expenses are a major part of the total cost of doing business. In addition to the depreciation of machinery, include depreciation on all related tools and storage buildings. Land costs would include property tax and any other land related costs. Other overhead expenses should include insurance, professional fees, office, vehicles and storage. In all cases, divide overhead expenses by the acreage of crop to express costs on a per acre basis. Return on investment is an opportunity cost to you — the rate of return that you expect or want on your invested capital.

If there are significant debt commitments for land and equipment, an alternative method of budgeting overhead expenses is to use the debt servicing requirements. In this case, use the actual interest and principal payment commitments, rather than depreciation and expected return on invested capital.

"Total Revenue" is the yield you expect multiplied by the price you expect. Yield information is most accurate if based on your experience with the land and techniques you will be using. If you do not have such records, check with AGRICORP or a local farm supply dealer. They can help you develop plans and reasonable expectations for your crops.

"Gross Margin" is the difference between total operating expenses and total revenue. "Operating Expenses" (seed, fertilizer, fuel, repairs) change with the crop grown and the production blend used. "Fixed or (overhead) Costs" will show little or no change whether one crop or another is grown. "Gross Margin" is a quick and easy measure for comparing relative profitability among your cropping choices.

Table 1. Adjustment for Nitrogen Requirement to crops following a legume crop

Type of crop	N requirement reduction (kg/ha)	
	Corn	Other crops
Less than 1/3 legume	0	0
1/3 to 1/2 legume	55	55
1/2 or more legume	110	110
Perennial legumes seeded/ploughed in same year	80	45[1]
Soybean and field bean residue	30	0

[1] Applies where the legume stand is thick and over 40 cm (16 in.) high.

2010 Crop Comparison Summary Table for Selected Field Crops ($ / acre)*

	Corn Conventional Tillage	Herbicide Tolerant Spring Canola	Non GMO Soybeans No till	Roundup Ready Soybeans No till	Coloured Beans	White/ Black Beans	Soft Winter Wheat No till	Barley	Hard Red Spring Wheat
Seed	80.00	50.00	49.85	74.90	124.00	88.00	48.70	39.00	50.70
Seed treatment			5.00	5.00					
Fertilizer	97.00	62.30	26.35	26.35	26.35	26.35	69.00	43.35	64.35
Pesticides	46.90	12.00	49.50	22.00	51.05	47.85	7.45	6.85	6.85
Total Inputs	**223.90**	**124.30**	**130.70**	**128.25**	**201.40**	**162.20**	**125.15**	**89.20**	**121.90**
Tillage	41.70	37.50			59.10	42.90		37.50	37.50
Planting	16.15	15.15	21.35	21.35	17.15	21.15	21.35	15.15	15.15
Spraying	9.05	9.05	18.05	18.05	18.05	18.05	9.05	9.05	9.05
Fertilizing	9.05	9.05	9.05	9.05	9.05	9.05	9.05	9.05	9.05
Harvesting & trucking	63.35	42.60	43.90	43.90	97.90	51.60	50.45	46.20	44.70
Total Machinery	**139.30**	**113.35**	**92.35**	**92.35**	**201.25**	**142.75**	**89.90**	**116.95**	**115.45**
Drying	62.45		11.05	11.05					
Crop insurance	14.65	16.75	13.25	13.25	36.50	21.70	9.55	8.75	9.75
Interest @ 3.25%	6.90	3.35	3.65	3.60	5.25	4.50	5.35	3.55	3.25
Marketing & other	30.10	3.40	9.70	9.70	4.10	6.50	4.20		2.60
Total Costs	**477.30**	**261.15**	**260.70**	**258.20**	**448.50**	**337.65**	**234.15**	**218.45**	**252.95**
Yield									
Price									
Gross Return									
Net Margin /acre									
Less:									
Land cost/rent									
Utilities/acct/misc.									
Net Return per acre									

* The crop comparison summary table is derived from the individual budgets in the publication. Some expense items have been combined in the summary table. For the breakout of the individual expenses refer to the respective budget in the publication.

ALFALFA-TIMOTHY HAY

DIRECT SEEDING ESTABLISHMENT	Sample Costs/Acre	Your Farm Budget
Seed — 12 lb/ac alfalfa	57.05	
Other seed (Timothy – 4 lb/ac)	7.40	
Inoculant	1.05	
Fertilizer — 40 kg/ha P	13.50	
— 30 kg/ha K	14.70	
Herbicide — burndown and broadleaf control	25.60	
Crop insurance	2.55	
Tractor and Machine Expenses		
Fuel (20 L) and lubricants	20.00	
Repairs	18.00	
Custom work (2 pesticide applications)	18.05	
(2 fertilizer applications, mixing & delivery)	18.10	
(bale wrapping – 1 cut)	30.85	
Twine		
Operator labour (self or hired)	37.95	
Interest	7.35	
Total Establishment Year Expenses	**272.15**	
ANNUAL OPERATING EXPENSES (assuming 2 cuts)*		
Establishment year expenses – over 4 years (less Est. year sales)	20.05	
Fertilizer — 130 kg/ha K (applied in fall)	63.70	
—		
Tractor and Machine Expenses		
Fuel (15 L) and lubricants	15.45	
Repairs	11.80	
Twine		
Crop insurance	10.05	
Custom work (2 fertilizer applications, mixing & delivery)	18.10	
(bale wrapping)	61.70	
Other costs		
Land rent		
Operator labour (self or hired)	38.05	
Interest on operating	4.10	
Total Annual Operating Expenses	**243.00**	
**Note: Assuming 3 cuts, the Annual Operating Expenses per acre would increase*		
REVENUE		
Expected yield _____		
Expected price _____		
Total Revenue (Yield × Price)		
GROSS MARGIN (Revenue – Operating Expenses)		
OVERHEAD EXPENSES		
Machinery — Depreciation	34.80	
— Interest on investment	26.00	
Land		
Other overhead	8.00	
NITROGEN CREDIT TO FOLLOWING CROPS IN ROTATION		
Nitrogen credit ($/ac = N reduction (from Table 1 × price of N)		
Grain yield increase		
Total benefits/year		
TOTAL EXPENSES	**311.80**	

BARLEY

OPERATING EXPENSES (costs based on projected yield of 1.5 tonne/ac (70 bu/ac))	**Sample Costs/Acre**	**Your Farm Budget**
Seed — 120 lb/ac certified treated(1.0 – 1.4 M seeds/ac)	39.00	
Fertilizer — 74 kg/ha N (2800 or less Corn Heat Units(CHU)	35.10	
— 46 kg/ha N (2800 or more CHU)	21.90	
— 20 kg/ha P	6.75	
— 30 kg/ha K	14.70	
Herbicide — annual grasses and Broadleaf weeds	6.85	
—		
Fungicide, if required	15.45	
Tractor and Machine Expenses		
Fuel (12 L) and lubricants	11.95	
Repairs and maintenance	16.15	
Crop insurance	8.75	
Custom work (fertilizer application, mixing & delivery)	9.05	
(pesticide application)	9.05	
other		
Trucking ($7.10/tonne)	10.65	
Storage		
Land rent		
Operator labour (self or hired)	10.30	
Interest on operating	3.55	
Total Operating Expenses — Grain (2800 or less CHU)	**197.30**	
Total Operating Expenses — Grain (2800 or more CHU)	**184.10**	
Expenses for Straw		
Tractor and Machine Expenses		
Fuel (3 L) and lubricants	2.75	
Repairs and maintenance	3.25	
Twine	2.75	
Other	11.30	
Total Operating Expenses — Straw	**20.05**	
Total Operating Expenses (2800 or less CHU)	**217.35**	
Total Operating Expenses (2800 or more CHU)	**204.15**	
REVENUE		
Expected barley yield _____		
Expected barley price _____		
Total Market Revenue (Yield × Price)		
Program payment		
Total Barley Revenue		
Expected straw yield _____		
Expected straw price _____		
Total Straw Revenue (Yield × Price)		
Total Revenue		
GROSS MARGIN (Revenue – Operating Expenses)		

OVERHEAD EXPENSES	Barley Only	Barley + Straw	
Machinery — Depreciation	26.30	30.30	
— Interest on investment	19.10	22.60	
Land			
Other overhead	4.35	5.35	
TOTAL EXPENSES (2800 or less CHU)	**247.05**	**275.60**	
TOTAL EXPENSES (2800 or more CHU)	**233.85**	**262.40**	

Breakeven price on your farm is: (total expenses/expected yield)

SPRING CANOLA

OPERATING EXPENSES (costs based on projected yield of 0.85 tonne/ac)	Sample Costs/Acre	Herbicide Tolerant Sample Costs/Acre	Your Farm Budget
Seed — 5 lb/ac – hybrid, treated	39.55	50.00	
Fertilizer — 96 kg/ha N(210 kg/ha Urea)[1]	45.75	45.75	
— 20 kg/ha P	6.75	6.75	
— 20 kg/ha K	9.80	9.80	
Herbicide — preplant, incorporated	16.85		
— mustard control, if required	12.75		
— other weed control		12.00	
Technology use agreement			
Insecticide, if required			
Fungicide, if required			
Tractor and Machine Expenses			
Fuel (12 L) and lubricants	11.95	11.95	
Repairs and maintenance	16.15	16.15	
Marketing fees ($4.00/tonne)	3.40	3.40	
Crop insurance	16.75	16.75	
Custom work (fertilizer application, mixing & delivery)	9.05	9.05	
(pesticide application)	9.05	9.05	
other			
Trucking ($7.10/tonne)	6.05	6.05	
Storage			
Land rent			
Operator labour (self or hired)	9.35	9.35	
Interest on operating	3.45	3.35	
Total Operating Expenses	**216.65**	**209.40**	
REVENUE			
Expected yield _____			
Expected price _____			
Total Market Revenue (Yield × Price)			
Program payment			
Total Revenue			
GROSS MARGIN (Revenue – Operating Expenses)			
OVERHEAD EXPENSES			
Machinery — Depreciation	27.00	27.00	
— Interest on investment	18.60	18.60	
Land			
Other overhead	5.80	5.80	
TOTAL EXPENSES	**268.05**	**260.80**	

Breakeven price on your farm is: (total expenses/expected yield)

[1] Nitrogen rate is based on nitrogen price of $ 1.19/ kg ($ 0.54 /lb) N and a canola price of $400/tonne.

See the canola section of the OMAFRA *Agronomy Guide for Field Crops*, Publication 811 for more accurate nitrogen requirements for canola, adjusted for yield and fertilizer cost.

WINTER CANOLA

OPERATING EXPENSES (costs based on projected yield of 1.3 tonne/ac)	Sample Costs/Acre	Your Farm Budget
Seed* — 3.5 lb/ac – hybrid , treated	37.50	
Fertilizer** — 224 kg/ha N (435 kg/ha urea + 113 kg/ha ammonium sulphate)[1]	109.75	
— 20 kg/ha P	6.75	
— 20 ka/ha K	9.80	
Herbicide — volunteer cereal control	8.30	
Insecticide, if required (Cabbage Seedpod Weevil)	7.15	
Fungicide, if required		
Tractor and Machine Expenses		
Fuel (9 L) lubricants	9.20	
Repairs and maintenance	13.05	
Marketing fees ($4.00/tonne)	5.20	
Crop insurance	16.75	
Custom work (fertilizer application, mixing & delivery)	9.05	
(2 pesticide applications)	18.05	
other		
Trucking ($7.10/tonne)	9.25	
Storage		
Land rent		
Operator labour (self or hired)	6.85	
Interest on operating	4.35	
Total Operating Expenses	271.00	
REVENUE		
Expected yield _____		
Expected price _____		
Total Market Revenue (Yield × Price)		
Program payment		
Total Revenue		
GROSS MARGIN (Revenue – Operating Expenses)		
OVERHEAD EXPENSES		
Machinery — Depreciation	18.90	
— Interest on investment	13.50	
Land		
Other overhead	4.30	
TOTAL EXPENSES (Hybrid)	307.70	

* Seeding rate recommended range is 3–5 lb/ac. The lower rate may be difficult to achieve with some seed drills.

** Fertilizer recommendation is for a field testing low in phosphorus and potassium. Additional nitrogen in the fall may be beneficial if seeding is delayed.

1. 45 kg/ac ammonium sulphate supplies 24 lb/ac sulphur.

COLOURED BEANS

OPERATING EXPENSES (costs based on projected yield of 18 cwt/ac)	Sample Costs/Acre	Your Farm Budget
Seed — 80 lb/ac (wide rows) certified, treated seed(with Cruiser insecticide)	124.00	
Fertilizer — Nitrogen, if required		
— 20 kg/ha P	6.75	
— 40 kg/ha K	19.60	
Herbicide — annual grass	17.00	
— broadleaf weeds	23.05	
— other weed control, if required		
Insecticide (potato leafhopper control)		
Fungicide, if required		
Crop Pre-harvest	11.00	
Tractor and Machine Expenses		
Fuel (24 L) and lubricants	24.10	
Repairs and maintenance	25.00	
Marketing fees ($5.00/tonne)	4.10	
Crop insurance	36.50	
Custom work (fertilizer application, mixing & delivery)	9.05	
(2 pesticide applications)	18.05	
Trucking ($7.10/tonne)	5.80	
Drying		
Land rent		
Operator labour (self or hired)	21.00	
Interest on operating	5.25	
Total Operating Expenses	**350.25**	
REVENUE		
Expected yield _____		
Expected price _____		
Total Market Revenue (Yield × Price)		
Less Pick Charges (typically 2% – 4%)		
Program payment		
Total Revenue		
GROSS MARGIN (Revenue – Operating Expenses)		
OVERHEAD EXPENSES		
Machinery — Depreciation	50.70	
— Interest on investment	37.70	
Land		
Other overhead	8.80	
TOTAL EXPENSES	**447.45**	

Breakeven price on your farm is: (total expenses/expected yield) _____

GRAIN CORN

	Tillage System			
	Conventional	Minimum Till	No-Till	
OPERATING EXPENSES (costs based on projected yield of 3.48 tonne/ac (137 bu/ac))	**Sample Costs/Acre**	**Sample Costs/Acre**	**Sample Costs/Acre**	**Your Farm Budget**
Seed — 32,000 kernels - treated	80.00	80.00	80.00	
Fertilizer[1]—139 kg/ha N(496 kg/ha of 28-0-0 U.A.N)	65.75	65.75	65.75	
— 20 kg/ha P	6.75	6.75	6.75	
— 50 kg/ha K	24.50	24.50	24.50	
Herbicide — annual grass and broadleaf weeds	46.90	46.90	46.90	
— burndown			11.00	
— other weed control, if required				
Insecticide, if required				
Tractor and Machine Expenses				
Fuel (18 L conv., 16 L min, 12 L no till) and lubricant.	18.35	16.30	12.45	
Repairs and maintenance	16.95	15.00	9.00	
Marketing fees ($0.40/tonne)	1.40	1.40	1.40	
Crop insurance	14.65	14.65	14.65	
Custom work (fertilizer appl., mixing & delivery)	9.05	9.05	9.05	
(pesticide applications)	9.05	9.05	18.05	
other				
Trucking ($7.30/tonne)	25.50	25.50	25.50	
Drying ($17.95/tonne, 8 points)	62.45	62.45	62.45	
Land rent				
Operator labour (self or hired)	14.35	10.70	7.95	
Storage ($2.06/tonne/month × 4 months)	28.70	28.70	28.70	
Interest on operating	6.90	6.75	6.90	
Total Operating Expenses	**431.25**	**423.45**	**431.00**	
REVENUE				
Expected yield _____				
Expected price _____				
Total Market Revenue (Yield × Price)				
Program payment				
Total Revenue				
GROSS MARGIN (Revenue – Operating Expenses)				
OVERHEAD EXPENSES				
Machinery — Depreciation	24.00	22.00	14.50	
— Interest on investment	17.10	16.00	12.00	
Land				
Other overhead	4.70	4.15	3.00	
TOTAL EXPENSES	**477.05**	**465.60**	**460.50**	

Breakeven price on your farm is: (total expenses/expected yield)

[1] Nitrogen rate is based on the nitrogen rate calculator. Nitrogen recommendation is for corn grown in southwestern/central Ontario, 2800 HU, clay loam soil, following wheat, with projected corn yield of 137 bu/ac, and nitrogen cost of $1.18/kg and corn price of $4.30/bu.

See www.gocorn.net for more accurate nitrogen requirements for corn. A CD version is available from OMAFRA's Agricultural Information Contact Centre at 1-877-424-1300.

GRAIN CORN – Genetically enhanced hybrids

	Conventional Tillage			
	Bt *Bacillus thuringiensis*	**RR** *Roundup Ready*	**Bt and RR**	
OPERATING EXPENSES (costs based on projected yield of 3.48 tonne/ac (137 bu/ac))	**Sample Costs/Acre**	**Sample Costs/Acre**	**Sample Costs/Acre**	**Your Farm Budget**
Seed — 32,000 kernels, treated	86.60	89.30	98.85	
Fertilizer[1] — 139 kg/ha N(496 kg/ha of 28-0-0 U.A.N)	65.75	65.75	65.75	
— 20 kg/ha P	6.75	6.75	6.75	
— 50 kg/ha K	24.50	24.50	24.50	
Herbicide — annual grass and broadleaf weeds	46.90	11.00	11.00	
— burndown				
— other weed control, if required				
Insecticide, if required				
Tractor and Machine Expenses				
Fuel (18 L) and lubricant	18.35	18.35	18.35	
Repairs and maintenance	16.95	16.95	16.95	
Marketing fees ($0.40/tonne)	1.40	1.40	1.40	
Crop insurance	14.65	14.65	14.65	
Custom work (fertilizer appl., mixing & delivery)	9.05	9.05	9.05	
(pesticide applications)	9.05	9.05	9.05	
other				
Trucking ($7.30/tonne)	25.50	25.50	25.50	
Drying ($17.95/tonne, 8 points)	62.45	62.45	62.45	
Land rent				
Operator labour (self or hired)	14.35	14.35	14.35	
Storage ($2.06/tonne/month × 4 months)	28.70	28.70	28.70	
Interest on operating	7.00	6.45	6.60	
Total Operating Expenses	**437.95**	**404.20**	**413.90**	
REVENUE				
Expected yield _____				
Expected price _____				
Total Market Revenue (Yield × Price)				
Program payment				
Total Revenue				
GROSS MARGIN (Revenue – Operating Expenses)				
OVERHEAD EXPENSES				
Machinery — Depreciation	24.00	24.00	24.00	
— Interest on investment	17.10	17.10	17.10	
Land				
Other overhead	4.70	4.70	4.70	
TOTAL EXPENSES	**483.75**	**450.00**	**459.70**	

Breakeven price on your farm is: (total expenses/expected yield)

[1] Nitrogen rate is based on the nitrogen rate calculator. Nitrogen recommendation is for corn grown in southwestern/central Ontario, 2800 HU, clay loam soil, following wheat, with projected corn yield of 137 bu/ac, and nitrogen cost of $1.18/kg and corn price of $4.30/bu.

See www.gocorn.net for more accurate nitrogen requirements for corn. A CD version is available from OMAFRA's Agricultural Information Contact Centre at 1-877-424-1300.

SILAGE CORN

OPERATING EXPENSES	Sample Costs/Acre	Your Farm Budget
Seed — 31,000 kernels, treated	77.50	
Fertilizer[1] — 139 kg/ha N(496 kg/ha of 28-0-0 U.A.N)	65.75	
— 20 kg/ha P	6.75	
— 50 kg/ha K	24.50	
Herbicide — annual grass and broadleaf weeds	46.90	
— other weed control, if required		
Insecticide, if required		
Tractor and Machine Expenses		
Fuel (28 L) and lubricants	28.00	
Repairs and maintenance	20.60	
Silo repair and maintenance		
Crop insurance	14.65	
Silage inoculant		
Custom work (fertilizer application, mixing & delivery)	9.05	
(pesticide applications)	9.05	
other		
Land rent		
Operator labour (self or hired)	30.70	
Interest on operating	5.40	
Total Operating Expenses	**338.85**	
REVENUE		
Expected yield _____		
Expected price _____		
Total Market Revenue (Yield × Price)		
Program payment		
Total Revenue		
GROSS MARGIN (Revenue – Operating Expenses)		
OVERHEAD EXPENSES		
Machinery — Depreciation	36.00	
— Interest on investment	27.00	
Land		
Other overhead	5.80	
TOTAL EXPENSES	**407.65**	

Breakeven price on your farm is: (total expenses/expected yield).....

[1] Nitrogen rate is based on the nitrogen rate calculator. Nitrogen recommendation is for corn grown in southwestern/central Ontario, 2800 HU, clay loam soil, following wheat, with projected corn yield of 137 bu/ac, and nitrogen cost of $1.18/kg and corn price of $4.30/bu.

See www.gocorn.net for more accurate nitrogen requirements for corn. A CD version is available from OMAFRA's Agricultural Information Contact Centre at 1-877-424-1300.

FLAX

OPERATING EXPENSES (costs based on projected yield of 0.71 tonne/ac)	Sample Costs/Acre	Your Farm Budget
Seed — 37.5 lb/ac certified, treated	21.15	
Fertilizer — 45 kg/ha N	21.45	
— 20 kg/ha P	6.75	
— 20 kg/ha K	9.80	
Herbicide — broadleaf weed control	6.15	
— grass weed control, if required	8.95	
— dessicant	11.00	
Fungicide		
Tractor and Machine Expenses		
Fuel (12 L) and lubricants	11.95	
Repairs and maintenance	16.15	
Crop insurance		
Custom work (fertilizer application, mixing & delivery)	9.05	
(2 pesticide applications)	18.05	
other		
Trucking ($7.10/tonne)	5.05	
Storage		
Land rent		
Operator labour (self or hired)	10.30	
Interest on operating	2.55	
Total Operating Expenses — Grain	**158.35**	
Expenses for Straw		
Tractor and Machine Expenses		
Fuel	2.75	
Repairs and maintenance	3.25	
Twine	2.75	
Other	11.30	
Total Operating Expenses — Straw	**20.05**	
Total Operating Expenses	**178.40**	
REVENUE		
Expected flax yield _____		
Expected flax price _____		
Total Market Revenue (Yield × Price)		
Program payment		
Total Flax Revenue		
GROSS MARGIN (Revenue – Operating Expenses)		

OVERHEAD EXPENSES	Flax Only	Flax & Straw	
Machinery — Depreciation	26.30	30.30	
— Interest on investment	19.10	22.60	
Land			
Other overhead	4.35	5.35	
TOTAL EXPENSES	**208.10**	**236.65**	

Breakeven price on your farm is: (total expenses/expected yield)

OATS

OPERATING EXPENSES (costs based on projected yield of 1.2 tonne/ac (78 bu/ac))	Sample Costs/Acre	Your Farm Budget
Seed — 85 lb/ac certified treated	29.85	
Fertilizer — 35 kg/ha N (Southern Ontario)	17.00	
— 55 kg/ha N (Northern Ontario)	26.30	
— 20 kg/ha P	6.75	
— 20 kg/ha K.	9.80	
Herbicide — weed control, if required	6.85	
Fungicide (for premium quality market)	15.45	
Tractor and Machine Expenses		
Fuel (12 L) and lubricants	11.95	
Repairs and maintenance	16.15	
Crop insurance	8.75	
Custom work (fertilizer application, mixing & delivery)	9.05	
(2 pesticide applications)	18.05	
Trucking ($7.10/tonne)	8.55	
Storage		
Land rent		
Operator labour (self or hired)	10.30	
Interest on operating	2.40	
Total Operating Expenses — Grain (Southern Ontario)	**170.90**	
Total Operating Expenses — Grain (Northern Ontario)	**180.20**	
Expenses for Straw		
Tractor and Machine Expenses		
Fuel	2.75	
Repairs and maintenance	3.25	
Twine	2.75	
Other	11.30	
Total Operating Expenses — Straw	**20.05**	
Total Operating Expenses (Southern Ontario)	**190.95**	
Total Operating Expenses (Northern Ontario)	**200.25**	
REVENUE		
Expected oat yield _____		
Expected oat price _____		
Total Market Revenue (Yield × Price)		
Program payment		
Total Oats Revenue		
Expected straw yield _____		
Expected straw price _____		
Total Straw Revenue (Yield × Price)		
Total Revenue		
GROSS MARGIN (Revenue – Operating Expenses)		

OVERHEAD EXPENSES	Oats Only	Oats & Straw	
Machinery — Depreciation	26.30	30.30	
— Interest on investment	19.10	22.60	
Land			
Other overhead	4.35	5.35	
TOTAL EXPENSES (Southern Ontario)	**220.65**	**249.20**	
TOTAL EXPENSES (Northern Ontario)	**229.95**	**258.50**	

Breakeven price on your farm is: (total expenses/expected yield)

ORGANIC – GRAIN CORN AND SOYBEANS*

	Grain Corn	Soybeans	
OPERATING EXPENSES (costs based on projected yield of 2.40 tonne/ac (94 bu/ac) Grain Corn; 0.82 tonne/ac (30 bu/ac) Soybeans)	**Sample Costs/Acre**	**Sample Costs/Acre**	**Your Farm Budget**
Seed — Grain Corn — 30,000 kernels, certified, organic; Soybeans —180,000 seeds/ac, certified, organic in 21-30" rows	69.40	51.35	
Seed Inoculant		2.00	
Fertilizer — Manure, compost**	100.00		
—			
Herbicide —			
—			
—			
Insecticide			
Fungicide			
Soil maintenance (cover crop, fallow etc.)**	50.00	50.00	
Tractor and Machine Expenses			
Fuel (20 L corn, 17 L soybeans) and lubricants	20.40	17.40	
Repairs and maintenance	18.35	23.95	
Marketing fees ($0.40/tonne (corn), $1.10/tonne (soybeans))	0.95	0.90	
Certification fees	2.00	2.00	
Crop insurance	14.65	23.35	
Custom work			
Added expense for handling organic crops			
Trucking ($7.30/tonne corn, $7.10/tonne soybeans)	17.60	6.00	
Drying ($17.95/tonne corn, $10.15/tonne soybeans)	43.05	8.30	
Storage ($2.06/tonne/month × 4 months)	19.80	6.75	
Land rent			
Operator labour (self or hired)	17.60	16.30	
Labour – hand weed	6.55	16.35	
Interest on operating	6.20	3.65	
Total Operating Expenses	**386.55**	**228.30**	
REVENUE			
Expected yield _____			
Expected price _____			
Total Market Revenue (Yield × Price)			
Program payment			
Total Revenue			
GROSS MARGIN (Revenue – Operating Expenses)			
OVERHEAD EXPENSES			
Machinery — Depreciation	31.00	40.00	
— Interest on investment	23.00	30.00	
Land			
Other overhead	5.00	8.00	
TOTAL EXPENSES	**445.55**	**306.30**	

Breakeven price on your farm is: (total expenses/expected yield)

* Organic budget estimates do not include transition period costs.

** Manure, compost and cover crop estimates are highly variable depending on individual farm situations.

ORGANIC – WINTER WHEAT AND SPELT*

OPERATING EXPENSES (costs based on projected yield of 1.6 tonne/ac (60 bu/ac) Wheat; 1.0 tonne/ac Spelt)	Winter Wheat Sample Costs/Acre	Spelt Sample Costs/Acre	Your Farm Budget
Seed — Wheat – 150 lb/ac certified, organic (1.4 – 1.7 M seeds/acre)	56.80	76.35	
— Spelt – 180 lb/ac certified, organic			
Fertilizer — Manure, compost**	100.00	100.00	
Herbicide			
Fungicide			
Soil maintenance (cover crop, fallow etc.) **	50.00	50.00	
Tractor and Machine Expenses			
Fuel (9 L) and lubricants	9.20	9.20	
Repairs and maintenance	11.75	11.75	
Crop insurance	10.70	9.80	
Marketing board fee ($2.00/tonne (wheat))	3.25		
Certification fees	2.00	2.00	
Custom work			
Added expense for handling organic crops			
Trucking ($7.10/tonne)	11.60	7.10	
Land rent			
Operator labour (self or hired)	7.85	7.85	
Labour – hand weed	6.55	6.55	
Interest on operating	7.30	7.55	
Total Operating Expenses — Grain	**277.00**	**288.15**	
Expenses for Straw			
Tractor and Machine Expenses			
Fuel and lubricants	2.75	2.75	
Repairs and maintenance	3.25	3.25	
Twine	2.75	2.75	
Other	11.30	11.30	
Total Operating Expenses — Straw	**20.05**	**20.05**	
Total Operating Expenses —	**297.05**	**308.20**	
REVENUE			
Expected yield _____			
Expected price _____			
Total Market Revenue (Yield × Price)			
Program payment			
Total Revenue			
Expected straw yield _____			
Expected straw price _____			
Total Straw Revenue (Yield × Price)			
Total Revenue			
GROSS MARGIN (Revenue – Operating Expenses)			

OVERHEAD EXPENSES	Wheat Only	Wheat & Straw	Spelt Only	Spelt & Straw	Your Farm Budget
Machinery — Depreciation	21.40	25.40	21.40	25.40	
— Interest on investment	15.20	18.70	15.20	18.70	
Land					
Other overhead	4.50	5.50	4.50	5.50	
TOTAL EXPENSES-	**318.10**	**346.65**	**329.25**	**357.80**	

Breakeven price on your farm is: (total expenses/expected yield)

* Organic budget estimates do not include transition period costs.

** Manure, compost and cover crop costs estimates are highly variable depending on individual farm situations

ORGANIC – BARLEY AND OATS*

OPERATING EXPENSES (costs based on projected yield of 1.2 tonne/ac (55 bu/ac) Barley; 0.96 tonne/ac (62 bu/ac) Oats)	BARLEY Sample Costs/Acre	OATS Sample Costs/Acre	Your Farm Budget
Seed — Barley – 150 lb/ac certified, organic — Oats – 105 lb/ac certified, organic	56.25	40.00	
Fertilizer — Manure/compost**			
Herbicide —			
Fungicide			
Soil maintenance (cover crop, fallow etc.) **	50.00	50.00	
Tractor and Machine Expenses			
Fuel (9 L) and lubricants	9.20	9.20	
Repairs and maintenance	11.75	11.75	
Crop insurance	8.75	8.75	
Certification fees	2.00	2.00	
Custom work			
Added expense for handling organic crops			
Trucking ($7.10 /tonne)	8.55	6.80	
Land rent			
Operator labour (self or hired)	7.85	7.85	
Labour – hand weed	6.55	6.55	
Interest on operating	4.35	3.85	
Total Operating Expenses — Grain	**165.25**	**146.75**	
Expenses for Straw			
Tractor and Machine Expenses			
Fuel and lubricants	2.75	2.75	
Repairs and maintenance	3.25	3.25	
Twine	2.75	2.75	
Other	11.30	11.30	
Total Operating Expenses — Straw	**20.05**	**20.05**	
Total Operating Expenses —	**185.30**	**166.80**	
REVENUE			
Expected yield _____			
Expected price _____			
Total Market Revenue (Yield × Price)			
Program payment			
Total Revenue			
Expected straw yield _____			
Expected straw price _____			
Total Straw Revenue (Yield × Price)			
Total Revenue			
GROSS MARGIN (Revenue – Operating Expenses)			

OVERHEAD EXPENSES	Barley Only	Barley & Straw	Oats Only	Oats & Straw	
Machinery — Depreciation	21.40	25.40	21.40	25.40	
— Interest on investment	15.20	18.70	15.20	18.70	
Land					
Other overhead	4.50	5.50	4.50	5.50	
TOTAL EXPENSES-	**206.35**	**234.90**	**187.85**	**216.40**	

Breakeven price on your farm is: (total expenses/expected yield)

* Organic budget estimates do not include transition period costs

** Manure, compost and cover crop costs estimates are highly variable depending on individual farm situations.

SOYBEANS

	Tillage System			
	Conventional	No-Till	Roundup Ready No-Till	
OPERATING EXPENSES (costs based on projected yield of 1.04 tonne/ac (38 bu/ac))	**Sample Costs/Acre**	**Sample Costs/Acre**	**Sample Costs/Acre**	**Your Farm Budget**
Seed — 200,000 seeds/ac in 14" rows	49.85	49.85	74.90	
Fertilizer — Nitrogen, if required				
— 20 kg/ha P	6.75	6.75	6.75	
— 40 kg/ha K	19.60	19.60	19.60	
Herbicide — annual grass and broadleaf weeds	38.50	38.50	11.00	
— burndown		11.00	11.00	
— other weed control, if required				
Seed treatment/inoculant, if required	5.00	5.00	5.00	
Tractor and Machine Expenses				
Fuel (12 L conv., 9 L no till) and lubricants	11.95	9.05	9.05	
Repairs and maintenance	17.20	10.90	10.90	
Marketing fees ($1.10/tonne)	1.15	1.15	1.15	
Crop insurance	13.25	13.25	13.25	
Drying ($10.15 /tonne)	11.05	11.05	11.05	
Custom work (pesticide application)	9.05	18.05	18.05	
(fertilizer appl., mixing & delivery)	9.05	9.05	9.05	
Added expense for IP				
Trucking ($7.10/tonne)	7.35	7.35	7.35	
Storage ($2.06/month/tonne × 4 months)	8.55	8.55	8.55	
Land rent				
Operator labour (self or hired)	10.30	6.15	6.15	
Interest on operating	3.55	3.65	3.60	
Total Operating Expenses	**222.15**	**228.90**	**226.40**	
REVENUE				
Expected yield _____				
Expected price _____				
Total Market Revenue (Yield × Price)				
Additional revenue from IP				
Program payment				
Total Revenue				
GROSS MARGIN (Revenue – Operating Expenses)				
OVERHEAD EXPENSES				
Machinery — Depreciation	27.55	16.70	16.70	
— Interest on investment	20.00	12.00	12.00	
Land				
Other overhead	6.00	2.85	2.85	
TOTAL EXPENSES	**275.70**	**260.45**	**257.95**	

Breakeven price on your farm is: (total expenses/expected yield)

SOFT WINTER WHEAT

	Tillage System		
	Conventional	No-Till	
OPERATING EXPENSES (costs based on projected yield of 2.1 tonne/ac (76 bu/ac))	**Sample Costs/Acre**	**Sample Costs/Acre**	**Your Farm Budget**
Seed — 110 lb/ac certified treated (1.4 – 1.7 M seeds/acre)	48.70	48.70	
Fertilizer — 110 kg/ha N	52.45	52.45	
— 20 kg/ha P	6.75	6.75	
— 20 kg/ha K	9.80	9.80	
Herbicide — broadleaf weeds	7.45	7.45	
Fungicide			
Tractor and Machine Expenses			
Fuel (12 L conv., 9 L no till) and lubricants	11.95	9.05	
Repairs and maintenance	16.15	10.90	
Crop insurance	9.55	9.55	
Marketing board fee ($2.00/tonne)	4.20	4.20	
Custom work (fertilizer application, mixing & delivery)	9.05	9.05	
(pesticide application)	9.05	9.05	
Added expense for IP			
Trucking ($7.10/tonne)	14.95	14.95	
Land rent			
Operator labour (self or hired)	10.30	6.15	
Interest on operating	5.65	5.35	
Total Operating Expenses — Grain	**216.00**	**203.40**	
Expenses for Straw			
Tractor and Machine Expenses			
Fuel (3 L) and lubricants	2.75	2.75	
Repairs and maintenance	3.25	3.25	
Twine	2.75	2.75	
Other	11.30	11.30	
Total Operating Expenses — Straw	**20.05**	**20.05**	
Total Operating Expenses —	**236.05**	**223.45**	
REVENUE			
Expected wheat yield _____			
Expected wheat price _____			
Total Market Revenue (Yield × Price)			
Additional income from IP			
Program payment			
Total Wheat Revenue			
Expected straw yield _____			
Expected straw price _____			
Total Straw Revenue (Yield × Price)			
Total Revenue			
GROSS MARGIN (Revenue – Operating Expenses)			

OVERHEAD EXPENSES	**Conventional**		**No Till**		
	Wheat Only	**Wheat & Straw**	**Wheat Only**	**Wheat & Straw**	
Machinery — Depreciation	26.30	30.30	16.00	20.00	
— Interest on investment	19.10	22.60	11.60	15.10	
Land					
Other overhead	4.35	5.35	3.00	4.00	
TOTAL EXPENSES	**265.75**	**294.30**	**234.00**	**262.55**	

Breakeven price on your farm is: (total expenses/expected yield)

HARD RED WINTER WHEAT

	Tillage System		
	Conventional	No-Till	
OPERATING EXPENSES (costs based on projected yield of 2.1 tonne/ac (76 bu/ac))	**Sample Costs/Acre**	**Sample Costs/Acre**	**Your Farm Budget**
Seed — 140 lb/ac certified treated (1.4 – 17 M seeds/acre)	59.70	59.70	
Fertilizer — 110 kg/ha N	52.45	52.45	
— 20 kg/ha P	6.75	6.75	
— 20 kg/ha K	9.80	9.80	
Herbicide — broadleaf weeds	7.45	7.45	
— other weed control, if required			
Fungicide			
Tractor and Machine Expenses			
Fuel (12 L conv., 9 L no till) and lubricants	11.95	9.05	
Repairs and maintenance	16.15	10.90	
Crop insurance	9.55	9.55	
Marketing board fee ($2.00/tonne)	4.20	4.20	
Custom work (fertilizer application, mixing & delivery)	9.05	9.05	
(pesticide application)	9.05	9.05	
Added expense for IP			
Trucking($7.10/tonne)	14.95	14.95	
Land rent			
Operator labour (self or hired)	10.30	6.15	
Interest on operating	5.95	5.65	
Total Operating Expenses — Grain	**227.30**	**214.70**	
Expenses for Straw			
Tractor and Machine Expenses			
Fuel (3 L) and lubricants	2.75	2.75	
Repairs and maintenance	3.25	3.25	
Twine	2.75	2.75	
Other	11.30	11.30	
Total Operating Expenses — Straw	**20.05**	**20.05**	
Total Operating Expenses	**247.35**	**234.75**	
REVENUE			
Expected wheat yield _____			
Expected wheat price _____			
Total Market Revenue (Yield × Price)			
Additional income from IP			
Program payment			
Total Wheat Revenue			
Expected straw yield _____			
Expected straw price _____			
Total Straw Revenue (Yield × Price)			
Total Revenue			
GROSS MARGIN (Revenue – Operating Expenses)			

OVERHEAD EXPENSES	Conventional		No-Till		
	Wheat Only	**Wheat & Straw**	**Wheat Only**	**Wheat & Straw**	
Machinery— Depreciation	26.30	30.30	16.00	20.00	
— Interest on investment	19.10	22.60	11.60	15.10	
Land					
Other overhead	4.35	5.35	3.00	4.00	
TOTAL EXPENSES	**277.05**	**305.60**	**245.30**	**273.85**	

Breakeven price on your farm is: (total expenses/expected yield)

HARD RED SPRING WHEAT

OPERATING EXPENSES (costs based on projected yield of 1.29 tonne/ac (47.4 bu/ac))	**Sample Costs/Acre**	**Your Farm Budget**
Seed — 130 lb/ac certified treated (1.4 – 1.6 m seeds/acre)	50.70	
Fertilizer — 90 kg/ha N (200 kg/ha Urea)	42.90	
— 20 kg/ha P	6.75	
— 30 kg/ha K	14.70	
Herbicide — broadleaf weeds	6.85	
— grass or wild oat control, if required		
— other weed control, if required		
Fungicide		
Tractor and Machine Expenses		
Fuel (12 L) and lubricants	11.95	
Repairs and maintenance	16.15	
Crop insurance	9.75	
Marketing board fee ($2.00/tonne)	2.60	
Custom work (fertilizer application, mixing & delivery)	9.05	
(pesticide application)	9.05	
other		
Added expense for IP		
Trucking ($7.10/tonne)	9.15	
Land rent		
Operator labour (self or hired)	10.30	
Interest on operating	3.25	
Total Operating Expenses — Grain	**203.15**	
Expenses for Straw		
Tractor and Machine Expenses		
Fuel (3 L)	2.75	
Repairs and maintenance	3.25	
Twine	2.75	
Other	11.30	
Total Operating Expenses — Straw	**20.05**	
Total Operating Expenses	**223.20**	
REVENUE		
Expected wheat yield _____		
Expected wheat price _____		
Total Market Revenue (Yield × Price)		
Additional income from IP		
Program payment		
Total Wheat Revenue		
Expected straw yield _____		
Expected straw price _____		
Total Straw Revenue (Yield × Price)		
Total Revenue		
GROSS MARGIN (Revenue – Operating Expenses)		

OVERHEAD EXPENSES	**Wheat Only**	**Wheat & Straw**	
Machinery — Depreciation	26.30	30.30	
— Interest on investment	19.10	22.60	
Land			
Other overhead	4.35	5.35	
TOTAL EXPENSES	**252.90**	**281.45**	

Breakeven price on your farm is: (total expenses/expected yield)

WHITE/BLACK BEANS

OPERATING EXPENSES (costs based on projected yield of 18 cwt/ac)	Sample Costs/Acre	Your Farm Budget
Seed — 150,000 seeds/ac (14 – 22 inch rows) certified, treated seed (with Cruiser insecticide)	88.00	
Fertilizer — Nitrogen, if required		
— 20 kg/ha P.	6.75	
— 40 kg/ha K.	19.60	
Herbicide — annual grass	16.25	
— broadleaf weeds	20.60	
Crop Pre-harvest	11.00	
Fungicide, if required		
Insecticide (Potato Leafhopper control)		
Tractor and Machine Expenses		
Fuel (19 L) and lubricants	19.15	
Repairs and maintenance	18.40	
Marketing fees ($7.97/tonne (White beans only))	6.50	
Crop insurance	21.70	
Custom work (fertilizer application, mixing & delivery)	9.05	
(2 pesticide applications)	18.05	
Trucking ($7.10/tonne)	5.80	
Drying		
Land rent		
Operator labour (self or hired)	15.95	
Interest on operating	4.50	
Total Operating Expenses	**281.30**	
REVENUE		
Expected yield _____		
Expected price _____		
Total Market Revenue (Yield × Price)		
Less Pick charges (typically 2%–4%)		
Program payment		
Total Revenue		
GROSS MARGIN (Revenue – Operating Expenses)		
OVERHEAD EXPENSES		
Machinery — Depreciation	30.20	
— Interest on investment	21.00	
Land		
Other overhead	5.00	
TOTAL EXPENSES	**337.50**	

Breakeven price on your farm is: (total expenses/expected yield)

Ontario Ministry of Agriculture, Food and Rural Affairs (OMAFRA)

RESOURCES

Selected Factsheets and Publications	**Order No.**
Budgeting Farm Machinery Costs	01-075
Leasing Farm Equipment	01-003
Guide to Custom Farmwork and Short-term Equipment Rental	07-019
Agronomy Guide for Field Crops	Publication 811
Guide to Weed Control, 2010–2011	Publication 75
Field Crop Protection Guide, 2009-2010	Publication 812

A full listing of publications is available on the OMAFRA website *www.ontario.ca/omafra* and can be ordered through ServiceOntario, available:

- online at www.publications.serviceontario.ca
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  1-800-668-9938 Toll-free across Canada
  1-800-268-7095 TTY Toll-free across Ontario
- in person at ServiceOntario Centres throughout the province.

OMAFRA has excellent tools and information to help manage your farm business at the Agricultural Business Management section *www.ontario.ca/agbusiness*. Results of the 2006 Custom Farmwork and Equipment Rental Rates survey are available here. The **Ontario Enterprise Budgets,** also found on the OMAFRA website, has budgets for cost of production, including field crops, posted with two display options. You can download a Budgeting Tool Excel file, modify the numbers to reflect your operation and then the file will complete the calculations. The Budgeting Tool also lets you assess the potential affect of production and marketing risk factors and risk management strategies. Or you can view, and then print Manual Budget Forms that have a Sample Cost and a Your Farm column to input numbers manually in hard copy.

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